

Career and Technical Education



Area of Study: Agriculture, Food and Natural Resources

	Career	Pathway: Agr	riculture, Food and	Natural Resour	ces	
Get the Facts			AND TECHNICAL EDUC ecommended Pathway Course		18	Careers in Agriculture are:
			select individual courses for ex			High demand/High
			plete Pathway for an in-depth fe			skill/High wage
		CLASS AVAILA	ABILITY MAY VARY AT YO	OUR SCHOOL		
	Cou	rse#	Foundation Courses (required	l) Credit		Career Examples
	180		Agriculture (Ag I)	.5/1.0	<u>_</u> h	•
	180		omprehensive (Ag II)	.50/1.0	1.0 credit	
	183	O2 Agriculture an	d Society	.50/1.0		
Workforce Trends			Florida Communication		_	
	180)? Agricultura an	Elective Courses d Natural Resources Comprehen	nsive (Ag III) .50/1.0		
	180		ood and Natural Resources –Aid			
	180:		THE PROPERTY OF THE PROPERTY O	.50/1.0		
	181		ction/ Science	.50/1.0		
	1820		usiness Management	.50/1.0		
	1820			.50/1.0		
	1840			.50/1.0		
	1850		rces Management	.50/1.0		According to the Montana Department of Labor and
	1820		ntrepreneurship ood, and Natural Resources-Wo	.50/1.0	-	Industry, the median
	109	Experience (SA		.50/1.0		hourly wage for
	Found		and the required credits can be us	sed as elective credit.	2.0 credits for completion	occupations within Business and Finance
			ecommended for Pathway comple			Operations is \$26.30.
State Graduation Requirements			Suggested High So	chool Plan of Study		College and Caree
High School Administrative Rules of Montana 10.55.905		9th Grade Suggeste		11th Grade Suggested	12th Grade Suggested	Beyond High School There are many options for
English/Language Arts	4.0	English 9 1.0	English 10 1.0	English 11 1.0	English 12 1.0	education and training beyond high school,
Mathematics	2.0	Math* 1.0	Math* 1.0	Math* 1.0	Math* 1.0	depending on your career
Social Studies	2.0	Social Studies* .50/1.0	Social Studies* .50/1.0	U.S History 1.0	U.S. Government 1.0	goals. • Certificate
Science	2.0	Earth Science 1.0	Biology 1.0	Science	Elective*	Associate degree
Health Enhancement	1.0	P.E./Health* .50	P.E./Health* .50	P.E./Heal	th Electives*	Bachelor's degreeProfessional degree
Arts	1.0			irses* 1.0		On-the-job training
Career and Technical Education	1.0	Pathway Foundation Course .50/1.0	Pathway Foundation Course .50/1.0	Pathway Elective Course .50/1.0	Pathway Elective Course .50/1.0	ApprenticeshipMilitary training
Work-Based Learning		Participation in a Pathw	ay-related work-based learning exp	perience		For more information on
Career and Technical Student Organization		National FFA Organiza				salary projections, labor
 *Talk to your school counselor about requirements in the core requirements vary district to district. Many CTE courses may qualify for dual enrollment credit, whit toward Pathway completion. Talk to your school counselor about the country of the coun	ch in some ca	ses may earn up to 1.0 credit	Dual enrollment course offerings v. Many Montana post-secondary prothrough dual enrollment. Check with	grams accept high school courses t		market demand, and training options, visit lmi.mt.gov.



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Area of Study: Agriculture, Food and Natural Resources

						,			
			Career Pa	thway: Plant Sys	stems				
Get the Facts			CAREER AND TECHNICAL EDUCATION Recommended Pathway Courses						
				ect individual courses for ex			Agriculture are: • High demand/High		
				e Pathway for an in-depth f			skill/High wage		
			CLASS AVAILABILITY MAY VARY AT YOUR SCHOOL						
		Cour		indation Courses (required	·		Career Examples		
		1800			.5/1.		•		
		1805			.50/1				
Workforce Trends		1805 1830			05./1 .50/1				
vvorktorce i rends		1630	Agriculture and So	Elective Courses	.30/1	.0			
		1800)2 Agriculture- Comp		.50/1				
		1805			0.5/1				
		1805	Turf and Landscap	e Management	0.5/1	.0			
		1805			.50/1				
		1820	1 6		0.5/1	1.0 12			
		1820	2 Agricultural Entre	preneurship	0.5/1	.0 1.0 cledit			
		1000	DI G 177						
		1809		orkplace Experience (SAE)	.50/1	2.0 credits for completion	_		
				the required credits can be us mended for Pathway comple		2.0 creams for completion			
				, ,		J			
State Graduation Req	uirements			Suggested High So	chool Plan of Study		College and Career		
High School Administrative Rules of Mont	ana 10.55.905		9th Grade Suggested	10th Grade Suggested	11th Grade Suggested	1 12th Grade Suggested	Beyond High School There are many options for		
English/Language Arts		4.0	English 9 1.0	English 10 1.0	English 11 1.0	English 12 1.0	education and training		
Mathematics		2.0	Math* 1.0	Math* 1.0	Math* 1.0	Math* 1.0	beyond high school, depending on your career		
Social Studies		2.0	Social Studies* .50/1.0	Social Studies* .50/1.0	U.S History 1.0	U.S. Government 1.0	goals. • Certificate		
Science		2.0	Earth Science 1.0	Biology 1.0	Scier	ce Elective*	Associate degree		
Health Enhancement		1.0	P.E./Health* .50	P.E./Health* .50		alth Electives*	Bachelor's degreeProfessional degree		
Arts		1.0		Arts Courses* 1.0			On-the-job training		
Career and Technical Education		1.0	Pathway Foundation Course .50/1.0	Pathway Foundation Course .50/1.0	Pathway Elective Course .50/1.0	Pathway Elective Course .50/1.0	ApprenticeshipMilitary training		
Work-Based Learning			Participation in a Pathway-related work-based learning experience						
Career and Technical Student Orga	anization		National FFA Organization	For more information on salary projections, labor					
 *Talk to your school counselor about require requirements vary district to district. Many CTE courses may qualify for dual enro 			•	Dual enrollment course offerings v Many Montana post-secondary pro through dual enrollment. Check wi	grams accept high school course	s toward a two- and four-year degree	market demand, and training options, visit lmi.mt.gov.		



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			Career Pat	thway: Animal S	ystems			
Get the Facts			Recon	ND TECHNICAL EDUC mmended Pathway Course	es		18	Careers in Agriculture are:
				ect individual courses for external terms of the external terms of				 High demand/High skill/High wage
				LITY MAY VARY AT YO			_	Skiii/Tiigii wage
		Cour		indation Courses (required		Credit		Career Examples
		1800				.5/1.0	<u></u>	•
		1800	E I			.50/1.0	1.0 credit	
		1810				0.5/1.0		
Workforce Trends		1830	2 Agriculture and So	Elective Courses		.50/1.0		
		1810)2 Small Animal Car			.50/1.0	1	
		1810				.50/1.0	-	
		1810				.50/1.0		
		1810				.50/1.0	<u> </u>	
		1820	<u> </u>			.50/1.0	1 0 anadit	
		1820	2 Agricultural Entre	preneursnip		0.5/1.0	1.0 credit	According to the Montana
							1	Department of Labor and
		1814	8 Animal Systems-V	Workplace Experience (SAE	E)	.50/1.0	1	Industry, the median hourly wage for
				the required credits can be us nmended for Pathway comple		t .	2.0 credits for completion	occupations within Business and Finance Operations is \$26.30.
State Graduation R	equirements			Suggested High So	chool Plan of Stu	udy		College and Career
High Scho Administrative Rules of M			9th Grade Suggested	10th Grade Suggested	11th Grade Sug	gested	12th Grade Suggested	Beyond High School There are many options for
English/Language Arts		4.0	English 9 1.0	English 10 1.0	English 11 1.0		English 12 1.0	education and training
Mathematics		2.0	Math* 1.0	Math* 1.0	Math* 1.0		Math* 1.0	beyond high school, depending on your career
Social Studies		2.0	Social Studies* .50/1.0	Social Studies* .50/1.0	U.S History 1.0		U.S. Government 1.0	goals. • Certificate
Science		2.0	Earth Science 1.0	Biology 1.0		Science	Elective*	Associate degree
Health Enhancement		1.0	P.E./Health* .50	P.E./Health* .50	F	P.E./Health	Electives*	Bachelor's degree Professional degree
Arts		1.0			urses* 1.0			On-the-job training
Career and Technical Education	1	1.0	Pathway Foundation Course .50/1.0	Pathway Foundation Course .50/1.0	Pathway Elective 0 .50/1.0	Course	Pathway Elective Course .50/1.0	ApprenticeshipMilitary training
Work-Based Learning			Participation in a Pathway-related work-based learning experience					For more information on
Career and Technical Student O			National FFA Organization					salary projections, labor
*Talk to your school counselor about req requirements vary district to district. Many CTE courses may qualify for dual e toward Pathway completion. Talk to your	enrollment credit, which	in some cas	ses may earn up to 1.0 credit	Dual enrollment course offerings v Many Montana post-secondary pro through dual enrollment. Check wi	grams accept high schoo	ol courses to		market demand, and training options, visit lmi.mt.gov.



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				• •				
		Career P	athway: Agribus	iness				
Get the Facts		CAREER AND TECHNICAL EDUCATION Recommended Pathway Courses Students may select individual courses for exploration or						
						 High demand/High skill/High wage 		
		a complete Pathway for an in-depth focus CLASS AVAILABILITY MAY VARY AT YOUR SCHOOL						
	Cour			Career Examples				
	1800	1 Introduction to Ag	griculture (Ag I)	.5/1.0	<u></u>	•		
	1820			.50/1.0	1.0 credit			
	1830	2 Agriculture and So	ociety	.50/1.0	1.0 credit			
Workforce Trends			TH. 4. G		-			
	1000	22 4 1 0	Elective Courses	50/1.0				
	1800 1820			.50/1.0 0.5/1.0				
	1820			0.5/1.0				
	1830			0.5/1.0				
	1830			0.5/1.0	10 10			
	1830	04 Animal Processing	9	0.5/1.0	☐ 1.0 credit			
	1830			0.5/1.0				
	1824		kplace Experience (SAE)	.50/1.0	2.0 1'4- 61-4'			
			the required credits can be un nmended for Pathway comple		2.0 credits for completion			
State Graduation Requir	ements		Suggested High S	chool Plan of Study		College and Career		
High School Administrative Rules of Montana	10.55.905	9th Grade Suggested	10th Grade Suggested	11th Grade Suggested	12th Grade Suggested	Beyond High School There are many options for		
English/Language Arts	4.0	English 9 1.0	English 10 1.0	English 11 1.0	English 12 1.0	education and training		
Mathematics	2.0	Math* 1.0	Math* 1.0	Math* 1.0	Math* 1.0	beyond high school, depending on your career		
Social Studies	2.0	Social Studies* .50/1.0	Social Studies* .50/1.0	U.S History 1.0	U.S. Government 1.0	goals. • Certificate		
Science	2.0	Earth Science 1.0	Biology 1.0	Science	Elective*	Associate degree		
Health Enhancement	1.0	P.E./Health* .50	P.E./Health* .50	P.E./Healt	h Electives*	Bachelor's degree Professional degree		
Arts	1.0			urses* 1.0	,	On-the-job training		
Career and Technical Education	1.0	Pathway Foundation Course .50/1.0	Pathway Foundation Course .50/1.0	Pathway Elective Course .50/1.0	Pathway Elective Course .50/1.0	ApprenticeshipMilitary training		
Work-Based Learning		Participation in a Pathway-	For more information on					
Career and Technical Student Organiz		National FFA Organization	salary projections, labor					
*Talk to your school counselor about requirement requirements vary district to district. Many CTE courses may qualify for dual enrollments.		•	Dual enrollment course offerings v Many Montana post-secondary pro			market demand, and training options, visit lmi.mt.gov.		



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Area of Study: Agriculture, Food and Natural Resources

		Care	er Pathway: A	griculture Product	ts and Processing	g		
Get the Facts			Re Students may a com	AND TECHNICAL EDU commended Pathway Course select individual courses for ex plete Pathway for an in-depth for BILITY MAY VARY AT YO	es xploration or focus	18	Careers in Agriculture are: • High demand/High skill/High wage	
		Cour		Foundation Courses (require			Career Examples	
		1800		Agriculture (Ag I)	.5/1.0	_	•	
		1830			.50/1.0	10 14		
		1830)1 Agricultural Pr	oduction	0.5/1.0	1.0 credit		
183Workforce Trends		1830)2 Agricultural Pr		0.5/1.0			
				Elective Courses				
		1830 1830			0.5/1.0 0.5/1.0	<u>-</u> h		
		1810		8	.50/1.0	-		
		1830			0.5/1.0			
		1830		<u> </u>	.50/1.0			
		1830			.50/1.0	1.0 credit	According to the Montana	
		1820			.50/1.0	- 1.0 credit	Department of Labor and Industry, the median	
		1820 1834		dership duction and Processing-Workplace	0.5/1.0		hourly wage for	
		1034	(SAE)	duction and Processing-Workplace	.50/1.0		occupations within	
State Graduation R	oquiroments			and the required credits can be u commended for Pathway complete		2.0 credits for completion	Business and Finance Operations is \$26.30. College and Career	
State Graduation K High Scho			Oth Crada Suggesta	- 55 5	11th Grade Suggested	12th Grade Suggested	Ü	
Administrative Rules of M			9th Grade Suggester	u Toth Grade Suggested	Titil Grade Suggested	12th Grade Suggested	Beyond High School There are many options for	
English/Language Arts		4.0	English 9 1.0	English 10 1.0	English 11 1.0	English 12 1.0	education and training	
Mathematics		2.0	Math* 1.0	Math* 1.0	Math* 1.0	Math* 1.0	beyond high school, depending on your career	
Social Studies		2.0	Social Studies* .50/1.0	Social Studies* .50/1.0	U.S History 1.0	U.S. Government 1.0	goals. • Certificate	
Science		2.0	Earth Science 1.0	Biology 1.0	Science	Elective*	Associate degree	
Health Enhancement		1.0	P.E./Health* .50	P.E./Health* .50	P.E./Heal	th Electives*	Bachelor's degree Professional degree	
Arts		1.0		Arts Co	urses* 1.0		On-the-job training	
Career and Technical Education		1.0	Pathway Foundation Course .50/1.0	Pathway Foundation Course .50/1.0	Pathway Elective Course .50/1.0	Pathway Elective Course .50/1.0	Apprenticeship Military training	
Work-Based Learning			Participation in a Pathw	Participation in a Pathway-related work-based learning experience				
Career and Technical Student O	rganization		National FFA Organizat	tion			For more information on salary projections, labor	
*Talk to your school counselor about requrequirements vary district to district. Many CTE courses may qualify for dual e toward Pathway completion. Talk to your	nrollment credit, which	h in some cas	ses may earn up to 1.0 credit	Dual enrollment course offerings v Many Montana post-secondary prothrough dual enrollment. Check with			market demand, and training options, visit lmi.mt.gov.	



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Area of Study: Agriculture, Food and Natural Resources

	Ca	reer P	athway: Agricu	ıltural Mechanic	es and Cons	truction	on	
Get the Facts		CAREER AND TECHNICAL EDUCATION Recommended Pathway Courses				18	Careers in Agriculture are:	
			Students may select individual courses for exploration or					High demand/High
				e Pathway for an in-depth f		skill/High wage		
			CLASS AVAILABILITY MAY VARY AT YOUR SCHOOL					
		Course	e# Four	Foundation Courses (required) Cre				Career Examples
		18001	Introduction to Ag	· · · · ·		.5/1.0	<u> </u>	Welding
		18401	<u> </u>	anics, Equipment and Struc	etures	.50/1.0	1.0 credit	Agriculture Equipment
		18302	Agriculture and So	ciety		.50/1.0	- 1.0 create	Sales& Service • Agricultural Equipment
Workforce Trends				FI 4' C			-	Service Service
		10402		Elective Courses		.50/1.0		•
		18402 18403	Agricultural Mecha Agricultural Struct	Agricultural Mechanics and Equipment			-	
		18403	Agricultural Struct			0.5/1.0		
		18203	<u> </u>			0.5/1.0	-	
		18202				0.5/1.0		
			5 1 1				1.0 credit	
		18448						
		Foundat	ndation courses taken beyond the required credits can be used as elective credit. 2.0 credits for completion					
				mended for Pathway comple				
Ct-t- C It' D	-			Constant III's L.C.	ala al Diama ef Ca	- 1		C-111 C
State Graduation Ro			9th Grade Suggested	Suggested High So 10th Grade Suggested	11th Grade Sug		124h Canada Caranastad	College and Career
Administrative Rules of Mo			9th Grade Suggested	Total Grade Suggested	11th Grade Sug	gestea	12th Grade Suggested	Beyond High School There are many options for
English/Language Arts		4.0	English 9 1.0	English 10 1.0	English 11 1.0		English 12 1.0	education and training
Mathematics		2.0	Math* 1.0	Math* 1.0	Math* 1.0		Math* 1.0	beyond high school, depending on your career
Social Studies		2.0	Social Studies* .50/1.0	Social Studies* .50/1.0	U.S History 1.0		U.S. Government 1.0	goals. • Certificate
Science		2.0	Earth Science 1.0	Biology 1.0		Science I	Elective*	Associate degree
Health Enhancement		1.0	P.E./Health* .50	P.E./Health* .50	1	P.E./Health	Electives*	Bachelor's degreeProfessional degree
Arts		1.0			urses* 1.0	~ '	n	On-the-job training
Career and Technical Education		1.0	Pathway Foundation Course .50/1.0	Pathway Foundation Course .50/1.0	Pathway Elective 0 .50/1.0	Course	Pathway Elective Course .50/1.0	ApprenticeshipMilitary training
Work-Based Learning			Participation in a Pathway-r	elated work-based learning exp	perience			For more information on
Career and Technical Student O	0		National FFA Organization					salary projections, labor
 *Talk to your school counselor about requrequirements vary district to district. Many CTE courses may qualify for dual er toward Pathway completion. Talk to your 	nrollment credit, which	in some cases	•	Dual enrollment course offerings v Many Montana post-secondary pro through dual enrollment. Check wi	grams accept high schoo	ol courses tov		market demand, and training options, visit lmi.mt.gov.



Career and Technical Education

Carper Pathway Natural Recourses



Area of Study: : Agriculture, Food and Natural Resources

		Career Path		DOGE COD		
Get the Facts			ND TECHNICAL EDUC			Careers in Finance
			nmended Pathway Course			are:
			ect individual courses for ex			High demand/High
			te Pathway for an in-depth for			skill/High wage
	-		LITY MAY VARY AT YO			
			indation Courses (required	•		Career Examples
	180			.5/1.0	<u>-</u> h	Accountant/Nonprofit
	180	<u> </u>	` U /	.50/1.0	1.0 credit	Accountant • Auditor
	185			0.5/1.0	4	Bookkeeper
Workforce Trends	183	O2 Agriculture and So		.50/1.0		Budget Analyst
	105	00 5	Elective Courses	50/1 O		Certified Public
	185			.50/1.0	- 1	Accountant
	185 185		Managamant	.50/1.0 .50/1.0	-	Financial Analyst
	183			.50/1.0	-	Financial Examiner Personal Financial
	182	- E		.50/1.0	-	Advisor
	189	· · · ·	, and Natural Resources-Wo	rknlace	- 1.0 credit	Treasurer/Controller
	109	Experience (SAE)		.50/1.0	1.0 credit	
		Experience (BrtE)			-	
State Constanting Day	Addi		the required credits can be us nmended for Pathway comple	tion	2.0 credits for completion	Calles and Carren
State Graduation Req	uirements	041 G 1 G 4 1		chool Plan of Study	124 G 1 G 4 1	College and Career
High School Administrative Rules of Mont	ana 10.55.905	9th Grade Suggested	10th Grade Suggested	11th Grade Suggested	12th Grade Suggested	Beyond High School There are many options for
English/Language Arts	4.0	English 9 1.0	English 10 1.0	English 11 1.0	English 12 1.0	education and training beyond high school,
Mathematics	2.0	Math* 1.0	Math* 1.0	Math* 1.0	Math* 1.0	depending on your career
Social Studies	2.0	Social Studies* .50/1.0	Social Studies* .50/1.0	U.S History 1.0	U.S. Government 1.0	goals.
a .						→ Certificate
Science	2.0	Earth Science 1.0	Biology 1.0	Science	Elective*	Certificate Associate degree
	1.0	Earth Science 1.0 P.E./Health* .50	Biology 1.0 P.E./Health* .50		Elective* h Electives*	Associate degreeBachelor's degree
Health Enhancement Arts			P.E./Health* .50	P.E./Healt	h Electives*	Associate degree Bachelor's degree Professional degree On-the-job training
Health Enhancement	1.0		P.E./Health* .50	P.E./Healt		Associate degreeBachelor's degreeProfessional degree
Health Enhancement Arts	1.0	P.E./Health* .50 Pathway Foundation Course .50/1.0	P.E./Health* .50 Arts Cou	P.E./Healt urses* 1.0 Pathway Elective Course .50/1.0	h Electives* Pathway Elective Course	Associate degree Bachelor's degree Professional degree On-the-job training Apprenticeship Military training
Health Enhancement Arts Career and Technical Education	1.0 1.0 1.0	P.E./Health* .50 Pathway Foundation Course .50/1.0	P.E./Health* .50 Arts Con Pathway Foundation Course .50/1.0 related work-based learning exp	P.E./Healt urses* 1.0 Pathway Elective Course .50/1.0	h Electives* Pathway Elective Course	Associate degree Bachelor's degree Professional degree On-the-job training Apprenticeship

0134 Agricultural Experience Program

The Supervised Agricultural Experience program is a hands-on, student planned way for them to apply skills learned in the classroom to real world agricultural experiences. With help from their agricultural teachers, students develop an SAE project based on one or more SAE categories: Entrepreneurship, Placement, Research and Experimentation and Exploratory.

Ag Mechanics, Ag Construction, Ag woods and Metal, Small Gas Engines/Electrical Wiring/Welding, Metal Fabrication, Welding 1 &2, Ag Power, Project Construction, CAD, CAD 2, Woods, Ag Shop 1, OSHA, Ag Portable Engine Systems, Ag Welding Fabrications, Engine Systems in Agriculture, Principals of Agricultural Power 1. 2.

Horticulture, , Ag Greenhouse, Plant/Range Science,

Ag I-IV, Ag Tech I< II< III< IV, Ag Orientation, Advanced VO-Ag, Ag Communications, Agricultural Issues, FFA Career Development, Fundamentals of Agriculture, FFA Leadership, SAE,

Animal Science, Veterinary Science, Equine Science

Ag Marketing, Ag Business, Farm Management, Entrepreneurship

Natural Resources, Environmental Science, Natural Resources of Montana,

EXP AG, Publications, Ag Projects, Co-Op, Individual Studies, Individual Career Preparation, Ag Special Projects, , Principals of Agricultural Power 1. 2.